## DEMOGRAPHY IN EARLY AMERICA

It has long been obvious that a separation exists between clinical medicine and public health. Whatever the historical origins of this diastasis, one result has been that the study of demography becomes constantly more remote from the interests of the practitioner and has come to be claimed by the hygienist, the economist, the government official, and the specialist in insurance. Concomitantly the physician has run the risk of losing contact with a body of knowledge that is capable of broadening and deepening his outlook.

The development of demographic thought and action in the North American colonies and in the United States from 1600 to 1800 is the subject of an attractive volume<sup>1</sup> recently issued by James Cassedy, Ph.D., a medical historian attached to the History of Medicine Division of the National Library of Medicine.

The author has ingeniously combined a chronological and a topical approach. Introductory chapters are devoted to the social, economic, and political forces which affected the early stages of American demography. In addition to these there are chapters on population theory, insurance, and medical statistics. These difficult subjects are set forth against the background of American life; thereby they are endowed with meaning. The style is simple and lucid throughout.

In his chapter on colonial Massachusetts Dr. Cassedy points out that while the inhabitants of Virginia collected vital statistics chiefly in order to fulfill their obligations to the Virginia Company, the New Englanders were motivated by a recognition of their own needs and aspirations. The histories written by William Bradford and John Winthrop may be regarded as incidental records of vital data. The preservation of systematic demographic information by the Puritans represented an effort to discover the will of God and hence was instituted at an early date. From its onset the mechanism was civil, not ecclesiastical, and was operated by government officials. The Massachusetts Bay system was followed elsewhere in New England and was influential also in the Cromwellian Commonwealth.

Cassedy, J. H.: Demography in Early America; Beginnings of the Statistical Mind, 1600-1800. Cambridge, Harvard Univ. Press, 1969, 357 pp.

In discussing the famous early demographers William Petty (1623-1687) and John Graunt (1620-1674), Dr. Cassedy mentions the skepticism which mercantilists expressed with respect to the value of colonization. Petty feared impoverishment of the home country through emigration. Others feared that England was erecting a dangerous transatlantic competitor in New England, whereas Virginia and the West Indies could be commended for raising products which gave employment to Englishmen at home. The 20th century "brain drain" to America can be seen to have had a historical precedent of sorts.

The story of the demographic developments that took place in the colonies is surprisingly interesting. For a long time the colonies had nothing resembling the famous bills of mortality that were issued in London; printing was scarce and the laws did not require compilation and publication. Early in the 18th century the newspapers began to fill the gap. The earliest journalistic efforts were sporadic and discontinuous, like some of the newspapers themselves. More continuous and successful were the reports of Benjamin Franklin in the *The Pennsylvania Gazette* and the annual statements of Christ-Church Parish in Philadelphia. Statistics were called to practical use in the inoculation controversy, which involved Cotton Mather, Zabdiel Boylston, and William Douglass. The important contributions of Douglass to statistics are explained and adequate reference is made to the demographic information presented in his well-known history.

Like many another learned author, Dr. Cassedy leads the reader to look into collateral topics which are valuable and fascinating. One of these is Edmund Halley's contribution to demography. Probably through Henri Justell, secretary of the Royal Society, the eminent astronomer had learned of certain tables of vital statistics that had been prepared by one Caspar Neumann (1648-1715), a studious clergyman of Breslau. Neumann's observations covered the five years from 1687 to 1691. Whereas earlier tabulations had been prepared in other cities, apparently Neumann's were the first which systematically recorded the ages of the deceased. By means of this collection Halley was able to calculate the probable duration of life, the details being set forth in his essay An estimate of the degrees of the mortality of mankind, drawn from the curious tables of the births and funerals at the city of Breslaw, with an attempt to ascertain the price of annuities upon lives. This paper, which Halley published in the 17th volume of the Philosophical

Transactions, and amplified by a supplement elsewhere in the same volume, is the basic document in the history of life insurance. Halley's contribution was well known to Benjamin Franklin and to Alexander Hamilton.

In the final chapter of his impressive book Dr. Cassedy deals with medical statistics. He describes the deficiencies in the American bills of mortality, which were prepared by laymen and which were obscured by inadequacies of terminology. Although William Cullen had taught many American physicians and had given them a system of nosology, Benjamin Rush had turned many away from nosology and this fact can be accounted harmful to the recording of reliable statistics. The influence of Holyoke, Currie, and Ramsay acted in the opposite direction, as did the occurrence of epidemic outbreaks. At the end of the period stood Noah Webster, whose epidemiological studies Dr. Cassedy justly characterizes as "a bold and original attempt to correlate disease and environment."

S. J.